(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 17 June 2004 (17.06.2004)

PCT

(10) International Publication Number WO 2004/050734 A1

(51) International Patent Classification7: B01J 31/38

C08G 18/22,

(21) International Application Number:

PCT/GB2003/005182

- (22) International Filing Date: 1 December 2003 (01.12.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0228268.9

4 December 2002 (04.12.2002) GB GB

0229498.1 19 December 2002 (19.12.2002)

- (71) Applicant (for all designated States except US): JOHN-SON MATTHEY PLC [GB/GB]; 2-4 Cockspur Street, Trafalgar Square, London SW1Y 5BQ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): STENGEL, Bruno, Frederic [FR/GB]; 3 Prestwick Court, Eaglescliffe, Stockton on Tees, Cleveland TS16 9ED (GB). SLACK, Neville [GB/GB]; 139 Station Road, Billingham, Stockton-on-Tees, Cleveland TS23 2RL (GB). PARTRIDGE, Martin, Graham [GB/GB]; 33 Houghton Banks, Ingleby Barwick, Stockton-on-Tees, Cleveland TS17 5AL (GB).

- (74) Agents: GIBSON, Sara, Hillary, Margaret et al.; Intellectual Property Department, Johnson Matthey Catalysts, P.O. Box 1 Belasis Avenu, Billingham, Cleveland TS23 1LB (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ORGANOMETALLIC CATALYST COMPOSITION AND PROCESS FOR POLYURETHANE MANUFACTURE US-ING SAID CATALYST

(57) Abstract: A catalyst composition comprises the reaction product of an alkoxide or condensed alkoxide of titanium, zirconium, hafnium, aluminium, iron (III), or a lanthanide, a 2-hydroxy carboxylic acid, a base and optionally an alcohol containing at least two hydroxyl groups. A process for the manufacture of polyurethane materials using the catalyst is also described.